WHAT IS CLAIMED IS:

1. A catalyst ink for a fuel cell comprising a catalytic material and poly(vinylidene fluoride).

2. The catalyst ink of claim 1, wherein the catalytic material comprises Pt.

3. The catalyst ink of claim 1, wherein the catalytic material comprises Pt and Ru.

4. The catalyst ink of claim 1, further comprising a second ionomer.

5. The catalyst ink of claim 5, wherein the ionomer comprises a liquid copolymer of tetrafluoroethylene and perfluorovinylethersulfonic acid.

6. A process for making a catalyst ink for a fuel cell, comprising mixing components comprising a catalytic material and poly(vinylidene fluoride).

7. The process of claim 6, further comprising adding to the mixture a membrane plasticizer.

8. The process of claim 7, wherein the plasticizer is a high boiling solvent.

9. The process of claim 7, wherein the plasticizer is N,N dimethylacetamide.

10. The process of claim 6, further comprising adding to the mixture a second ionomer comprising a liquid copolymer of tetrafluoroethylene and perfluorovinylethersulfonic acid.

11. A process for making an electrode for a fuel cell, comprising:

(a) providing a catalyst ink comprising a catalytic material and poly(vinylidene fluoride); and

(b) applying the catalyst ink to at least one side of a substrate.

12. The process of claim 11, wherein the substrate is a membrane.

13. The process of claim 12, wherein the membrane is a PSSA-PVDF membrane.

14. The process of claim 11, wherein the ink further comprises a plasticizer.

15. The process of claim 14, wherein the plasticizer is N,N dimethylacetamide.

16. The process of claim 12, further comprising roughening the surface of the membrane prior to applying the catalyst ink.

17. The process of claim 12, wherein the substrate is a backing.

18. The process of claim 17, wherein the backing is a carbon paper.

19. A process for making a membrane electrode assembly for a fuel cell, comprising:

(a) providing a catalyst ink comprising a catalytic material and poly(vinylidene fluoride);

(b) applying the catalyst ink to at least one side of a membrane; and

(c) bonding the membrane to at least one electrode.

20. The process of claim 19, wherein the membrane is bonded to the electrode at a temperature of greater than about 180 °C.

21. The process of claim 19, wherein the catalyst ink further comprises a plasticizer.

22. The process of claim 21, wherein the plasticizer is N,N dimethylacetamide.

23. The process of claim 19, further comprising adding to the catalyst ink a second ionomer comprising a liquid copolymer of tetrafluoroethylene and perfluorovinylethersulfonic acid.

24. The process of claim 19, further comprising roughening the surface of the membrane prior to applying the catalyst ink.

25. The process of claim 19, wherein the electrode comprises a catalyst layer comprising a catalytic material selected from Pt and Pt/Ru and an ionomer.

26. A fuel cell comprising a membrane electrode assembly, wherein the membrane electrode assembly is made by the process of:

(a) providing a catalyst ink comprising a catalytic material and poly(vinylidene fluoride);

(b) applying the catalyst ink to at least one side of a membrane; and

(c) bonding the membrane to at least one electrode.